

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the catalytic oxidation of hydrogen chloride to chlorine ~~by means~~ in the presence of oxygen ~~over~~ and a catalyst comprising on a support

- a) from 0.001 to 30% by weight of gold,
- b) from 0 to 3% by weight of one or more alkaline earth metals,
- c) from 0 to 3% by weight of one or more alkali metals,
- d) from 0 to 10% by weight of one or more rare earth metals,
- e) from 0 to 10% by weight of one or more further metals selected from the group consisting of ruthenium, palladium, platinum, osmium, iridium, silver, copper and rhenium,

in each case based on the total weight of the catalyst, wherein the carrier is selected from the group consisting of titanium dioxide, zirconium dioxide, aluminum oxide and mixtures thereof, and wherein gold is applied to the support as an aqueous solution of a gold compound.

Claim 2 (Original): The process as claimed in claim 1, wherein gold is applied to the support as an aqueous solution of  $\text{AuCl}_3$  or  $\text{HAuCl}_4$ .

Claim 3 (Currently Amended): The process as claimed in claim 1, wherein the metals other than gold are applied to the support as aqueous solutions of their chlorides, oxychlorides ~~and~~ or oxides.

Claim 4 (Previously Presented): The process as claimed in claim 1, wherein the reaction temperature is  $\leq 300^{\circ}\text{C}$ .

Claim 5 (New): The process as claimed in claim 1, wherein the reaction temperature is 200 to  $250^{\circ}\text{C}$ .

Claim 6 (New): The process as claimed in claim 1, wherein the catalyst comprises on a support 0.01 to 10% by weight of gold.

Claim 7 (New): The process as claimed in claim 1, wherein the catalyst comprises on a support 0.1 to 5% by weight of gold.

Claim 8 (New): The process as claimed in claim 1, wherein a stream of hydrogen chloride and an oxygen-containing stream are fed into an oxidation zone and hydrogen chloride is partly oxidized to chlorine in the presence of the catalyst to give a product gas stream comprising chlorine, unreacted oxygen, unreacted hydrogen chloride and water vapor.

Claim 9 (New): The process as claimed in claim 1, wherein the process is carried out isothermally or approximately isothermally, and continuously.

Claim 10 (New): The process as claimed in claim 1, wherein the process is carried out continuously as a fixed-bed process in a shell-and-tube reactor, at reactor temperatures of from  $150$  to  $500^{\circ}\text{C}$  and a pressure of from 1 to 25 bar.

Claim 11 (New): The process as claimed in claim 1, wherein the process is carried out continuously as a fixed-bed process in a shell-and-tube reactor, at reactor temperatures of from 200 to 250°C and a pressure of from 2.0 to 15 bar.

Claim 12 (New): The process as claimed in claim 8, wherein the process is carried out isothermally or approximately isothermally, and continuously.

Claim 13 (New): The process as claimed in claim 8, wherein the process is carried out continuously as a fixed-bed process in a shell-and-tube reactor, at reactor temperatures of from 150 to 500°C and a pressure of from 1 to 25 bar.

Claim 14 (New): The process as claimed in claim 8, wherein the process is carried out continuously as a fixed-bed process in a shell-and-tube reactor, at reactor temperatures of from 200 to 250°C and a pressure of from 2.0 to 15 bar.

Claim 15 (New): The process as claimed in claim 8, wherein the catalyst comprises on a support 0.1 to 5% by weight of gold.

Claim 16 (New): The process as claimed in claim 9, wherein the catalyst comprises on a support 0.1 to 5% by weight of gold.

Claim 17 (New): The process as claimed in claim 10, wherein the catalyst comprises on a support 0.1 to 5% by weight of gold.

Claim 18 (New): The process as claimed in claim 11, wherein the catalyst comprises on a support 0.1 to 5% by weight of gold.

Claim 19 (New): The process as claimed in claim 12, wherein the catalyst comprises on a support 0.1 to 5% by weight of gold.

Claim 20 (New): The process as claimed in claim 1, wherein the catalyst consists essentially of, on a support:

- a) from 0.001 to 30% by weight of gold,
- b) from 0 to 3% by weight of one or more alkaline earth metals,
- c) from 0 to 3% by weight of one or more alkali metals,
- d) from 0 to 10% by weight of one or more rare earth metals,
- e) from 0 to 10% by weight of one or more further metals selected from the group consisting of ruthenium, palladium, platinum, osmium, iridium, silver, copper and rhenium,

in each case based on the total weight of the catalyst, wherein the carrier is selected from the group consisting of titanium dioxide, zirconium dioxide, aluminum oxide and mixtures thereof, and wherein gold is applied to the support as an aqueous solution of a gold compound.